

**Commonwealth of Kentucky**  
**Natural Resources and Environmental Protection Cabinet**  
**Department for Environmental Protection**  
**Division for Air Quality**  
**803 Schenkel Lane**  
**Frankfort, Kentucky 40601**  
**(502) 573-3382**

**AIR QUALITY PERMIT**

**Permittee Name:** Florida Tile Industries, Incorporated  
**Mailing Address:** P. O. Box 447, Lakeland, Florida 33802

**Source Name:** Florida Tile Industries, Incorporated  
**Mailing Address:** 1247 Alton Road  
Lawrenceburg, Kentucky 40342

**Source Location:** Same as above

**Permit Type:** Federally-Enforceable  
**Review Type:** Title V

**Permit Number:** V-99-020(Revision 1)  
**Log Number:** F455  
**Application**  
**Complete Date:** February 20, 1998

**KYEIS ID #:** 102-0060-0008  
**AFS Plant ID #:** 21-005-00008  
**SIC Code:** 3253

**Region:** Bluegrass  
**County:** Anderson

**Issuance Date:** September 24, 1999  
**Revision Date:** February 29, 2000  
**Expiration Date:** September 24, 2004

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**John E. Hornback, Director**  
**Division for Air Quality**

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## **SECTION A - PERMIT AUTHORIZATION**

Pursuant to a duly submitted application which was determined to be complete on September 29, 1998, the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any emission points without first having submitted a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in the Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**

### **RAILCAR UNLOADING:**

04 (04) Railcar Unloading Facility: Unloading shed and Fuller Kenyon. Installed June 1968

### **APPLICABLE REGULATIONS:**

401 KAR 63:010, *Fugitive emissions*, applies to the railcar unloading operations.

#### **1. Operating Limitations:**

None

#### **2. Emission Limitations:**

All reasonable measure shall be taken to prevent particulate matter from becoming airborne at all times from the railcar unloading operations. These measures shall include, but are not limited to the following:

- a. A shed shall be used to enclose the unloading operations.
- b. Use of a dust control coupling for the railcar unloading operations.

#### **3. Testing Requirements:**

None

#### **4. Specific Monitoring Requirements:**

None

#### **5. Specific Recordkeeping Requirements:**

None

#### **6. Specific Reporting Requirements:**

None

#### **7. Specific Control Equipment Operating Conditions:**

None

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS****BATCHING OPERATIONS:**

<b><u>EMISSION POINT</u></b>	<b><u>DESCRIPTION</u></b>
01 (01)	Silo System # 1: Silo, gyrator screen, weigh hopper and screw conveyor. Modified May 1995.
02 (02)	Silo System # 3: Silo, gyrator screen, weigh hopper and screw conveyor. Modified May 1995.
03 (03)	Silo System # 2: Silo, 2 gyrator screens, 2 weigh hoppers and 2 screw conveyors. Modified May 1995.
11 (11)	Fast Fire Body Mixer System: Eirich mixer, feed conveyor, conveyor, surge hopper and bucket elevator. Installed May 1995.
16 (16)	Fast Fire Rework System: 2 rework hoppers, grinder, cyclone receiver, surge hopper, screw conveyor and weigh hopper. Installed May 1995.
53 (53)	Silo System # 6: Silo, gyrator screen, weigh hopper and screw conveyor. Installed June 1987.
54 (54)	Silo System # 5: Silo, gyrator screen and weigh hopper. Installed June 1987.
55 (55)	Silo System # 4: Silo, 2 gyrator screens, 2 weigh hoppers, belt conveyor and screw conveyor. Modified May 1995.
56 (56)	Traditional Body Mixer System: Eirich mixer, 2 bucket elevators, 2 conveyor belts, surge hopper and screw conveyor. Installed June 1987.
57 (57)	Traditional Body Rework System: rework hopper, 5 screw conveyors, grinder, screen, bucket elevator, rework surge hopper and rework weigh hopper. Modified July 1993.
58 (58)	Dust Recycle System for Traditional Body Preparation: 2 screw conveyors, bucket elevator, dust surge hopper, gyrator screen and weigh hopper. Installed October 1987.
59 (59)	Traditional Body Pneumatic Press Feeder System: wet storage bin, bucket elevator and dynamic air pneumatic transporter. Installed October 1987.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

<u>EMISSION POINT</u>	<u>DESCRIPTION</u>
62 (62)	Dust Recycle System for Fast Body Preparation: surge hopper, dust screen, weigh hopper and screw conveyor. Installed May 1995.
63 (63)	Fast Fire Body Pneumatic Press Feeder System: belt conveyor, bucket elevator, surge hopper and dynamic air pneumatic transporter. Installed May 1995.

**APPLICABLE REGULATIONS:**

401 KAR 59:010, *New process operations*, which applies to emission units constructed or modified on or after July 2, 1975.

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Appendix A, the emissions of particulate matter for each respective emission point listed under Batching Operations, shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of tons/hr).

For process rates up to 60,000 lbs/hr:  $E = 3.59 P^{0.62}$

For the equation E = rate of emission in lb/hr and P = process weight rate in tons/hr.

- b. Pursuant to Regulation 401 KAR 59:010, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than twenty (20) percent opacity.

***Compliance Demonstration Method:***

Compliance with the hourly emission limit shall be determined as follows:

Hourly Emission Rate = [Monthly processing rate x Emission factor listed in Kentucky Emissions Inventory x (1 - efficiency of the control device) ÷ (Total hours of operation per month)]

Compliance with the opacity limits shall be determined as follows:

- i. During periods of normal operation of the control device or control devices or baghouses, no compliance demonstration is necessary.
- ii. If any of the emission units associated with a control device or baghouse are in operation during any period of malfunction of the associated control device or baghouse, the permittee shall determine compliance through maintenance of the records required by Item d under **5. Specific Recordkeeping Requirements** (below).

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements:**

Pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Method 5 for particulate matter using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the division.

**4. Specific Monitoring Requirements:**

- a. The permittee shall monitor and maintain records of the following parameters:
  - i. The monthly processing rate of input material placed into each silo.
  - ii. The monthly input hours of operation (hours operated/month) of each silo.
- b. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a monitoring device to determine the static pressure drop across every control device or baghouse except for silo bin vent filters BV-Silo1 through BV-Silo6. These monitoring devices shall be read and the results recorded once a day during the operation of the respective process unit. A daily visual observation shall be performed of the silo bin vent filters BV-Silo1 through BV-Silo6 in accordance with **5. Specific Recordkeeping Requirements:** d. below.

**5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the control devices or baghouses:

- a. The design and/or manufacturer's specifications.
- b. The operational procedures and preventive maintenance records.
- c. Daily records of the pressure drop across each control device or baghouse during all periods of operation.
- d. For the daily visual observations of the silo bin vent filters BV-Silo 1 through BV-Silo 6 and during all periods of startup, shutdown, or malfunction of any control devices or baghouses, a daily (calendar day) log of the following information shall be kept:
  - i. Whether any air emissions were visible from the facilities associated with the control device or baghouse of concern.
  - ii. Whether the visible emissions were normal for the process.  
If no abnormal visible emissions are observed, then no further observations or records are required. If abnormal visible emissions are observed, the permittee shall record the following information:
    - iii. The color of the emissions and whether the emissions were light or heavy.
    - iv. The cause of the visible emissions.
    - v. Any corrective actions taken.
- e. All maintenance activities performed at any control device or baghouse.

See **4. Specific Monitoring Requirements** above for additional recordkeeping requirements.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**6. Specific Reporting Requirements:**

Semiannually in accordance with the Monitoring, Recordkeeping, and Reporting Requirements Section F.5.

**7. Specific Control Equipment Operating Conditions:**

The control devices or baghouses associated with Emission Points 01, 02, 03, 11, 16, 53, 54, 55, 56, 57, 58, 59, 62, and 63 shall control particulate emissions and be operated properly in accordance with the manufacturer's specifications and/or standard operating procedures at all times the emission points are in use. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the process unit/emission points are in operation but the associated control device or baghouse is not.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****LINE # 1:**

<b><u>EMISSION POINT</u></b>	<b><u>DESCRIPTION</u></b>
19 (19)	Line # 1 Tile Presses: Presses # 11 & 12. Installed: July 1996.
32 (32)	Glaze Spray Booth Line # 1: Booth # 11. Installed: July 1996.
39 (39)	Line # 1 Roller Kiln: Kiln # 1. Installed: July 1996.
46 (46)	Glaze Spray Booth Line # 1: Booth # 12. Installed: March 1997.

**APPLICABLE REGULATIONS:**

401 KAR 59:010, *New process operations*, which applies to emission units constructed on or after July 2, 1975.

401 KAR 53:010, *Ambient air quality standards*. (See Section D)

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Appendix A, the emissions of particulate matter for each respective emission point shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of tons/hr).

$$\text{For process rates up to 60,000 lbs/hr: } E = 3.59 P^{0.62}$$

For the equation E = rate of emission in lb/hr and P = process weight rate in tons/hr

***Compliance Demonstration Method:***

Compliance with the hourly emission limit shall be determined as follows:

$$\text{Hourly Emission Rate} = \left[ \text{Monthly processing rate} \times \text{Emission factor listed in Kentucky Emissions Inventory} \times (1 - \text{efficiency of the control device}) \div (\text{Total hours of operation per month}) \right]$$

- b. Pursuant to Regulation 401 KAR 59:010, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than twenty (20) percent opacity.

***Compliance Demonstration Method:***

Compliance with the opacity limits shall be determined as follows:

- i. During periods of normal operation of the control devices or baghouses, no compliance demonstration is necessary.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- ii. If any of the emission units associated with a control device or baghouse are in operation during any period of malfunction of the associated control device or baghouse, the permittee shall determine compliance through maintenance of the records required by Item d under **5. Specific Recordkeeping Requirements** (below).
- c. Pursuant to Regulation 401 KAR 53:010, Ambient air quality standards, source wide emissions of gaseous fluoride (HF) shall not exceed the following limits more than once per year:
  - i. Maximum twelve-hour average: 3.68 ug/m<sup>3</sup>
  - ii. Maximum twenty-four-hour average: 2.86 ug/m<sup>3</sup>See **Section D Source Emission Limitations and Testing Requirements** for source wide requirements.

**3. Testing Requirements:**

- a. Except as noted below, pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Method 5 for particulate matter using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the division.
- b. See **Section D 3. Testing Requirements**

**4. Specific Monitoring Requirements:**

- a. The permittee shall monitor and maintain records of the following parameters for Emission Point # 19:
  - i. The monthly amount of material placed into each press.
  - ii. The monthly hours of operation (hours operated/month) of each press.
- b. The permittee shall monitor and maintain records of the following parameters for Emission Point # 32 and 46:
  - i. The monthly amount of glaze used in each spray booth.
  - ii. The monthly hours of operation (hours operated/month) of each spray booth.
- c. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a monitoring device to determine the static pressure drop across every control device or baghouse except for the bin vent filters at the presses (BV-Press11 and BV-Press12) which vent inside the process building. These monitoring devices shall be read and the results recorded once a day during the operation of the respective process unit. A daily visual observation shall be performed of the bin vent filters at the presses (BV-Press11 and BV-Press12) in accordance with **5. Specific Recordkeeping Requirements:** d. below.

## **SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

### **5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the control devices or baghouses:

- a. The design and/or manufacturer's specifications.
- b. Operational procedures and preventive maintenance records.
- c. Daily records of the pressure drop across the control device baghouse during all periods of operation.
- d. For the daily visual observations of the bin vent filters at the presses (BV-Press11 and BV-Press12) and during all periods of startup, shutdown, or malfunction of any control devices or baghouses, a daily (calendar day) log of the following information shall be kept:
  - i. Whether any air emissions were visible from the facilities associated with the control device or baghouse of concern.
  - ii. Whether the visible emissions were normal for the process.  
If no abnormal visible emissions are observed, then no further observations or records are required. If abnormal visible emissions are observed, the permittee shall record the following information:
    - iii. The color of the emissions and whether the emissions were light or heavy.
    - iv. The cause of the visible emissions.
    - v. Any corrective actions taken.
- e. All maintenance activities performed at any control device or baghouse.

See **4. Specific Monitoring Requirements** above for additional recordkeeping requirements.

### **6. Specific Reporting Requirements:**

Semiannually in accordance with the Monitoring, Recordkeeping, and Reporting Requirements Section F.5.

### **7. Specific Control Equipment Operating Conditions:**

The control device or baghouse associated with Emission Point 19 and the water filter trap associated with Emission Points 32 and 46 shall control particulate emissions and be operated properly in accordance with the manufacturer's specifications and/or standard operating procedures at all times the emission points are in use. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated control device or baghouse is not.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****LINE # 2:**

<b><u>EMISSION POINT</u></b>	<b><u>DESCRIPTION</u></b>
23 (23)	Line # 2 Tile Presses: Presses # 21 & # 22. Installed: August 1996.
42 (42)	Line # 2 Roller Kiln: Kiln # 2. Installed: August 1996.
47 (47)	Glaze Spray Booth Line # 2: Booth # 21. Installed: August 1996.

**APPLICABLE REGULATIONS:**

401 KAR 59:010, *New process operations*, which applies to emission units constructed on or after July 2, 1975.

401 KAR 53:010, *Ambient air quality standards*. (See Section D)

**1. Operating Limitations:** None**2. Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Appendix A, the emissions of particulate matter for each respective emission point shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of tons/hr).

$$\text{For process rates up to 60,000 lbs/hr: } E = 3.59 P^{0.62}$$

For the equation E = rate of emission in lb/hr and P = process weight rate in tons/hr

***Compliance Demonstration Method:***

Compliance with the hourly emission limit shall be determined as follows:

Hourly Emission Rate = [Monthly processing rate x Emission factor listed in Kentucky Emissions Inventory x (1 - efficiency of the control device) ÷ (Total hours of operation per month)]

- b. Pursuant to Regulation 401 KAR 59:010, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than twenty (20) percent opacity.

***Compliance Demonstration Method:***

Compliance with the opacity limits shall be determined as follows:

- i. During periods of normal operation of the control devices or baghouses, no compliance demonstration is necessary.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- ii. If any of the emission units associated with a control device or baghouse are in operation during any period of malfunction of the associated control device or baghouse, the permittee shall determine compliance through maintenance of the records required by Item d under **5. Specific Recordkeeping Requirements** (below).
- c. Pursuant to Regulation 401 KAR 53:010, Ambient air quality standards, source wide emissions of gaseous fluoride (HF) shall not exceed the following limits more than once per year:
  - i. Maximum twelve-hour average: 3.68 ug/m<sup>3</sup>
  - ii. Maximum twenty-four-hour average: 2.86 ug/m<sup>3</sup>See **Section D Source Emission Limitations and Testing Requirements** for source wide requirements.

**3. Testing Requirements:**

- a. Except as noted below, pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Method 5 for particulate matter using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the division.
- b. See **Section D 3. Testing Requirements**.

**4. Specific Monitoring Requirements:**

- a. The permittee shall monitor and maintain records of the following parameters for Emission Point # 23:
  - i. The monthly amount of material placed into each press.
  - ii. The monthly hours of operation (hours operated/month) of each press.
- b. The permittee shall monitor and maintain records of the following parameters for Emission Point # 47:
  - i. The monthly amount of glaze used in each spray booth.
  - ii. The monthly hours of operation (hours operated/month) of each spray booth.
- c. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a monitoring device to determine the static pressure drop across every control device or baghouse except for the bin vent filters at the presses (BV-Press21 and BV-Press22) which vent inside the process building. These monitoring devices shall be read and the results recorded once a day during the operation of the respective process unit. A daily visual observation shall be performed of the bin vent filters at the presses (BV-Press21 and BV-Press22).

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the control device or control devices or baghouses:

- a. The design and/or manufacturer's specifications.
- b. Operational procedures and preventive maintenance records.
- c. Daily records of the pressure drop across the control device or baghouse during all periods of operation.
- d. For the daily visual observations of the bin vent filters at the presses (BV-Press21 and BV-Press 22) and during all periods of startup, shutdown, or malfunction of any control devices or baghouses, a daily (calendar day) log of the following information shall be kept:
  - i. Whether any air emissions were visible from the facilities associated with the control device or baghouse of concern.
  - ii. Whether the visible emissions were normal for the process.  
If no abnormal visible emissions are observed, then no further observations or records are required. If abnormal visible emissions are observed, the permittee shall record the following information:
    - iii. The color of the emissions and whether the emissions were light or heavy.
    - iv. The cause of the visible emissions.
    - v. Any corrective actions taken.
- e. All maintenance activities performed at any control device or baghouse.

See **4. Specific Monitoring Requirements** above for additional recordkeeping requirements.

**6. Specific Reporting Requirements:**

Semiannually in accordance with the Monitoring, Recordkeeping, and Reporting Requirements as specified in Section F.5.

**7. Specific Control Equipment Operating Conditions:**

The control device or baghouse associated with Emission Point 23 and the water filter trap associated with Emission Point 47 shall control particulate emissions and be operated properly in accordance with the manufacturer's specifications and/or standard operating procedures at all times the emission points are in use. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated control device or baghouse is not.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****LINE # 3:**

<b><u>EMISSION POINT</u></b>	<b><u>DESCRIPTION</u></b>
24 (24)	Line # 3 Tile Presses: Presses # 31, # 32, and # 33. Installed: February 1971.
40 (40)	Line # 3 Tunnel Kiln: Kiln # 3. Installed: 1971.
48 (48)	Glaze Spray Booth Line # 3: Booth # 31. Installed: January 1997.
51 (51)	Glaze Spray Booth Line # 3: Booth # 32. Installed: June 1987.

**APPLICABLE REGULATIONS:**

401 KAR 59:010, *New process operations*, which applies to emission units constructed on or after July 2, 1975.

401 KAR 53:010, *Ambient air quality standards*. (See Section D)

401 KAR 61:020, *Existing Process operations*, which applies to emission units constructed before July 2, 1975.

**1. Operating Limitations:** None**2. Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Appendix A, the emissions of particulate matter for Emission Points # 24, # 48 and # 51 shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of tons/hr).

For process rates up to 60,000 lbs/hr:  $E = 3.59 P^{0.62}$

For the equation  $E =$  rate of emission in lb/hr and  $P =$  process weight rate in tons/hr

Pursuant to Regulation 401 KAR 59:010, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than twenty (20) percent opacity.

- b. Pursuant to Regulation 401 KAR 61:020, Appendix A, the emissions of particulate matter for Emission Point # 40 shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of tons/hr).

For process rates up to 60,000 lbs/hr:  $E = 4.10 P^{0.67}$

For the equation  $E =$  rate of emission in lb/hr and  $P =$  process weight rate in tons/hr

Pursuant to Regulation 401 KAR 61:020, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than forty (40) percent opacity. (Emission Point # 40)

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. Pursuant to Regulation 401 KAR 53:010, Ambient air quality standards, source wide emissions of gaseous fluoride (HF) shall not exceed the following limits more than once per year:

- i. Maximum twelve-hour average: 3.68 ug/m<sup>3</sup>
- ii. Maximum twenty-four-hour average: 2.86 ug/m<sup>3</sup>

See **Section D Source Emission Limitations and Testing Requirements** for source wide requirements.

***Compliance Demonstration Method:***

Compliance with the hourly emission limit shall be determined as follows:

$$\text{Hourly Emission Rate} = \frac{[\text{Monthly processing rate} \times \text{Emission factor listed in Kentucky Emissions Inventory} \times (1 - \text{efficiency of the control device}) \div (\text{Total hours of operation per month})]$$

Compliance with the opacity limits shall be determined as follows:

- i. During periods of normal operation of the control devices or baghouses, no compliance demonstration is necessary.
- ii. If any of the emission units associated with a control device or baghouse are in operation during any period of malfunction of the associated control device or baghouse, the permittee shall determine compliance through maintenance of the records required by Item d under **5. Specific Recordkeeping Requirements** (below).

**3. Testing Requirements:**

- a. Except as noted below, pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Method 5 for particulate matter using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the division.
- b. See **Section D 3. Testing Requirements**

**4. Specific Monitoring Requirements:**

- a. The permittee shall monitor and maintain records of the following parameters for Emission Point # 24:
  - i. The monthly amount of material placed into each press.
  - ii. The monthly hours of operation (hours operated/month) of each press.
- b. The permittee shall monitor and maintain records of the following parameters for Emission Point # 48 and # 51:
  - i. The monthly amount of glaze used in each spray booth.
  - ii. The monthly hours of operation (hours operated/month) of each spray booth.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

- c. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a monitoring device to determine the static pressure drop across every control device or baghouse except for the bin vent filters at the presses (BV-Press31, BV-Press32 and BV-Press33) and the dust collectors DC31 which vent inside the process building. These monitoring devices shall be read and the results recorded once a day during the operation of the respective process unit. A daily visual observation shall be performed of the bin vent filters at the presses (BV-Press31, BV-Press32 and BV-Press33) and the dust collectors DC31 in accordance with **5. Specific Recordkeeping Requirements:** d. below.

**5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the control devices or baghouses:

- a. The design and/or manufacturer's specifications.
- b. The operational procedures and preventive maintenance record.
- c. Daily records of the pressure drop across the control device or baghouse during all periods of operation
- d. For the daily visual observations of the bin vent filters at the presses (BV-Press31, BV-Press32 and BV-Press33) and the dust collectors DC31 and during all periods of startup, shutdown, or malfunction of any control devices or baghouses, a daily (calendar day) log of the following information shall be kept:
  - i. Whether any air emissions were visible from the facilities associated with the control device or baghouse of concern.
  - ii. Whether the visible emissions were normal for the process.  
If no abnormal visible emissions are observed, then no further observations or records are required. If abnormal visible emissions are observed, the permittee shall record the following information:
    - iii. The color of the emissions and whether the emissions were light or heavy.
    - iv. The cause of the visible emissions.
    - v. Any corrective actions taken.
- e. All maintenance activities performed at any control device or baghouse.

See **4. Specific Monitoring Requirements** above for additional recordkeeping requirements.

**6. Specific Reporting Requirements:**

Semiannually in accordance with the Monitoring, Recordkeeping, and Reporting Requirements contained in Section F.5.

**7. Specific Control Equipment Operating Conditions:**

The control device or baghouse associated with Emission Points # 24, # 48 and # 51 shall control particulate emissions and be operated properly in accordance with manufacturers' specifications and/or standard operating procedures at all times the emission points are in use. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated control device or baghouse is not.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**LINE # 4:**

<b><u>EMISSION POINT</u></b>	<b><u>DESCRIPTION</u></b>
50 (50)	Glaze Spray Booth Line # 4: Booth # 41. Installed: June 1987.
60 (60)	Line # 4 Tile Presses: Presses # 41, # 42 & # 43. Installed October 1987.
64 (64)	Glaze Spray Booth Line # 4: Booth # 43. Installed: June 1987.
70 (70)	Line # 4 Tunnel Kiln: Kiln # 4. Installed: June 1987.

**APPLICABLE REGULATIONS:**

401 KAR 59:010, *New process operations*, which applies to emission units constructed on or after July 2, 1975.

401 KAR 53:010, *Ambient air quality standards*. (See Section D)

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Appendix A, the emissions of particulate matter for each respective emission point shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of tons/hr).

For process rates up to 60,000 lbs/hr:  $E = 3.59 P^{0.62}$

For the equation E = rate of emission in lb/hr and P = process weight rate in tons/hr

***Compliance Demonstration Method:***

Compliance with the hourly emission limit shall be determined as follows:

Hourly Emission Rate =  $\frac{[\text{Monthly processing rate} \times \text{Emission factor listed in Kentucky Emissions Inventory} \times (1 - \text{efficiency of the control device}) \div (\text{Total hours of operation per month})]$

- b. Pursuant to Regulation 401 KAR 59:010, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than twenty (20) percent opacity.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)*****Compliance Demonstration Method:***

Compliance with the opacity limits shall be determined as follows:

- i. During periods of normal operation of the control devices or baghouses, no compliance demonstration is necessary.
  - ii. If any of the emission units associated with a control device or baghouse are in operation during any period of malfunction of the associated control device or baghouse, the permittee shall determine compliance through maintenance of the records required by Item d under **5. Specific Recordkeeping Requirements** (below).
- c. Pursuant to Regulation 401 KAR 53:010, Ambient air quality standards, source wide emissions of gaseous fluoride (HF) shall not exceed the following limits more than once per year:
- i. Maximum twelve-hour average: 3.68 ug/m<sup>3</sup>
  - ii. Maximum twenty-four-hour average: 2.86 ug/m<sup>3</sup>

See **Section D Source Emission Limitations and Testing Requirements** for source wide requirements.

**3. Testing Requirements:**

- a. Except as noted below, pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Method 5 for particulate matter using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the division.
- b. See **Section D 3. Testing Requirements**

**4. Specific Monitoring Requirements:**

- a. The permittee shall monitor and maintain records of the following parameters for Emission Point # 50 and # 64:
  - i. The monthly amount of glaze used in each spray booth.
  - ii. The monthly hours of operation (hours operated/month) of each spray booth.
- b. The permittee shall monitor and maintain records of the following parameters for Emission Point # 60:
  - i. The monthly amount of material placed into each press.
  - ii. The monthly hours of operation (hours operated/month) of each press.
- c. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a monitoring device to determine the static pressure drop across every control device or baghouse except for the bin vent filters at the presses (BV-Press41, BV-Press42 and BV-Press43) and the dust collectors DC41 and DC42 which vent inside the process building. These monitoring devices shall be read and the results recorded once a day during the operation of the respective process unit. A daily visual observation shall be performed of the bin vent filters at the presses (BV-Press41, BV-Press42 and BV-Press43) and the dust collectors DC41 and DC42 in accordance with **5. Specific Recordkeeping Requirements:** d. below.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the control devices or baghouses:

- a. The design and/or manufacturer's specifications.
- b. The operational procedures and preventive maintenance records.
- c. Daily records of the pressure drop across the control device or baghouse during all periods of operation.
- d. For the daily visual observations of the bin vent filters at the presses (BV-Press41, BV-Press42 and BV-Press43) and the dust collectors DC41 and DC42 and during all periods of startup, shutdown, or malfunction of any control devices or baghouses, a daily (calendar day) log of the following information shall be kept:
  - i. Whether any air emissions were visible from the facilities associated with the control device or baghouse of concern.
  - ii. Whether the visible emissions were normal for the process.  
If no abnormal visible emissions are observed, then no further observations or records are required. If abnormal visible emissions are observed, the permittee shall record the following information:
    - iii. The color of the emissions and whether the emissions were light or heavy.
    - iv. The cause of the visible emissions.
    - v. Any corrective actions taken.
- e. All maintenance activities performed at any control device or baghouse.

See **4. Specific Monitoring Requirements** above for additional recordkeeping requirements.

**6. Specific Reporting Requirements:**

Semiannually in accordance with Monitoring, Recordkeeping, and Reporting Requirements Section F.5.

**7. Specific Control Equipment Operating Conditions:**

The control device or baghouse associated with Emission Point 50, 60 and 64 shall control particulate emissions and be operated properly in accordance with the manufacturer's specifications and/or standard operating procedures at all times the emission points are in use. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated control device or baghouse is not.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****LINE # 5:**

<b><u>EMISSION POINT</u></b>	<b><u>DESCRIPTION</u></b>
25 (25)	Line # 5 Tile Presses: Presses # 51 & # 52. Installed: October 1995.
29 (29)	Line # 5 Roller Kiln: Kiln # 5. Installed: October 1995.
33 (33)	Line # 5 Spray Booth: Booth # 51. Installed: October 1995.
37 (37)	Line # 5 Spray Booth: Booth # 52. Installed: March 1997.

**APPLICABLE REGULATIONS:**

401 KAR 59:010, *New process operations*, which applies to emission units constructed on or after July 2, 1975.

401 KAR 53:010, *Ambient air quality standards*. (See Section D)

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Appendix A, the emissions of particulate matter for each respective emission point shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of tons/hr).

$$\text{For process rates up to 60,000 lbs/hr: } E = 3.59 P^{0.62}$$

For the equation E = rate of emission in lb/hr and P = process weight rate in tons/hr

***Compliance Demonstration Method:***

Compliance with the hourly emission limit shall be determined as follows:

$$\text{Hourly Emission Rate} = \frac{[\text{Monthly processing rate} \times \text{Emission factor listed in Kentucky Emissions Inventory} \times (1 - \text{efficiency of the control device})]}{(\text{Total hours of operation per month})}$$

- b. Pursuant to Regulation 401 KAR 59:010, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than twenty (20) percent opacity.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)*****Compliance Demonstration Method:***

Compliance with the opacity limits shall be determined as follows:

- i. During periods of normal operation of the control devices or baghouses, no compliance demonstration is necessary.
  - ii. If any of the emission units associated with a control device or baghouse are in operation during any period of malfunction of the associated control device or baghouse, the permittee shall determine compliance through maintenance of the records required by Item d under **5. Specific Recordkeeping Requirements** (below).
- c. Pursuant to Regulation 401 KAR 53:010, Ambient air quality standards, source wide emissions of gaseous fluoride (HF) shall not exceed the following limits more than once per year:
- i. Maximum twelve-hour average: 3.68 ug/m<sup>3</sup>
  - ii. Maximum twenty-four-hour average: 2.86 ug/m<sup>3</sup>
- See **Section D Source Emission Limitations and Testing Requirements** for source wide requirements.

**3. Testing Requirements:**

- a. Except as noted below, pursuant to Regulations 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Method 5 for particulate matter using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the division.
- b. See **Section D 3. Testing Requirements**

**4. Specific Monitoring Requirements:**

- a. The permittee shall monitor and maintain records of the following parameters for Emission Point # 25:
  - i. The monthly amount of material placed into each press.
  - ii. The monthly hours of operation (hours operated/month) of each press.
- b. The permittee shall monitor and maintain records of the following parameters for Emission Point # 33 and # 37:
  - i. The monthly amount of glaze used in each spray booth.
  - ii. The monthly hours of operation (hours operated/month) of each spray booth.
- c. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a monitoring device to determine the static pressure drop across every control device or baghouse except for the bin vent filters at the presses (BV-Press51 and BV-Press52) which vent inside the process building. These monitoring devices shall be read and the results recorded once a day during the operation of the respective process unit. A daily visual observation shall be performed of the bin vent filters at the presses (BV-Press51 and BV-Press52) in accordance with **5. Specific Recordkeeping Requirements:** d. below.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the control devices or control device or control devices or baghouses:

- a. The design and/or manufacturer's specifications.
- b. The operational procedures and preventive maintenance records.
- c. Daily records of the pressure drop across the control device or baghouse during all periods of operation.
- d. For the daily visual observations of the bin vent filters at the presses (BV-Press51 and BV-Press52) and during all periods of startup, shutdown, or malfunction of any control devices or baghouses, a daily (calendar day) log of the following information shall be kept:
  - i. Whether any air emissions were visible from the facilities associated with the control device or baghouse of concern.
  - ii. Whether the visible emissions were normal for the process.  
If no abnormal visible emissions are observed, then no further observations or records are required. If abnormal visible emissions are observed, the permittee shall record the following information:
    - iii. The color of the emissions and whether the emissions were light or heavy.
    - iv. The cause of the visible emissions.
    - v. Any corrective actions taken.
- e. All maintenance activities performed at any control device or baghouse.

See **4. Specific Monitoring Requirements** above for additional recordkeeping requirements.

**6. Specific Reporting Requirements:**

Semiannually in accordance with Monitoring, Recordkeeping, and Reporting Requirements in Section F.5.

**7. Specific Control Equipment Operating Conditions:**

The control device or control devices or baghouses associated with Emission Point 25 and the water filter trap associated with Emission Points 33 and 37 shall control particulate emissions and be operated properly in accordance with the manufacturer's specifications and/or standard operating procedures at all times the emission points are in use. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated control device or baghouse is not.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****GLAZE MIXING OPERATIONS:**

<b><u>EMISSION POINT</u></b>	<b><u>DESCRIPTION</u></b>
26 (26)	Batching Station. Modified: July 1998.

**APPLICABLE REGULATIONS:**

401 KAR 59:010, *New process operations*, which applies to emission units constructed on or after July 2, 1975.

1. **Operating Limitations:** None

2. **Emission Limitations:**

- a. Pursuant to Regulation 401 KAR 59:010, Appendix A, the emissions of particulate matter for each respective emission point shall not exceed the allowable rate limit as calculated by the following equation using the process weight rate (in units of tons/hr).

$$\text{For process rates up to 60,000 lbs/hr: } E = 3.59 P^{0.62}$$

For the equation E = rate of emission in lb/hr and P = process weight rate in tons/hr

***Compliance Demonstration Method:***

Compliance with the hourly emission limit shall be determined as follows:

$$\text{Hourly Emission Rate} = \frac{[\text{Monthly processing rate} \times \text{Emission factor listed in Kentucky Emissions Inventory} \times (1 - \text{efficiency of the control device}) \div (\text{Total hours of operation per month including dumping, unloading, and milling})]$$

- b. Pursuant to Regulation 401 KAR 59:010, Section 3, no person shall cause, suffer, allow or permit any continuous emission into the open air from a control device or stack which is equal to or greater than twenty (20) percent opacity.

***Compliance Demonstration Method:***

Compliance with the opacity limits shall be determined as follows:

- i. During periods of normal operation of the control devices or baghouses, no compliance demonstration is necessary.
- ii. If any of the emission units associated with a control device or baghouse are in operation during any period of malfunction of the associated control device or baghouse, the permittee shall determine compliance through maintenance of the records required by Item d under **5. Specific Recordkeeping Requirements** (below).

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)****3. Testing Requirements:**

- a. Except as noted below, pursuant to Regulations 401 KAR 59:005, Section 2 (2) and 401 KAR 50:045, Section 1, performance testing in accordance with EPA Method 5 for particulate matter using the Reference Methods specified in Regulation 401 KAR 50:015 shall be conducted as required by the division.
- b. See **Section D 3. Testing Requirements**

**4. Specific Monitoring Requirements:**

- a. The permittee shall monitor and maintain records of the following parameters:
  - i. The monthly processing rate of material placed into hopper.
  - ii. The monthly hours of operation (hours operated/month) of the batching station.
- b. The permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a monitoring device to determine the static pressure drop across every control device or baghouse. These monitoring devices shall be read and the results recorded once a day during the operation of the respective process unit.

**5. Specific Recordkeeping Requirements:**

The permittee shall maintain records of the following information for the control device or baghouses:

- a. The design and/or manufacturer's specifications.
- b. The operational procedures and preventive maintenance records.
- c. Daily records of the pressure drop across the control device or baghouse during all periods of operation.
- d. During all periods of startup, shutdown, or malfunction of any control devices or baghouses, a daily (calendar day) log of the following information shall be kept:
  - i. Whether any air emissions were visible from the facilities associated with the control device or baghouse of concern.
  - ii. Whether the visible emissions were normal for the process.  
If no abnormal visible emissions are observed, then no further observations or records are required. If abnormal visible emissions are observed, the permittee shall record the following information:
    - iii. The color of the emissions and whether the emissions were light or heavy.
    - iv. The cause of the visible emissions.
    - v. Any corrective actions taken.
- e. All maintenance activities performed at any control device or baghouse.

See **4. Specific Monitoring Requirements** above for additional recordkeeping requirements.

**6. Specific Reporting Requirements:**

Semiannually in accordance with Monitoring, Recordkeeping, and Reporting Requirements Section F.5.

**SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**

**7. Specific Control Equipment Operating Conditions:**

The control device or control devices or baghouses associated with Emission Point 26 shall control particulate emissions and be operated properly in accordance with the manufacturer's specifications and/or standard operating procedures at all times the emission points are in use. The permittee shall record the occurrence, duration, cause, and any corrective action taken for each incident when the emission points are in operation but the associated control device or baghouse is not.

**SECTION C - INSIGNIFICANT ACTIVITIES**

The following activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4). While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Line # 1 Tile Dryer: Dryer # 11. Emission Point # 17	NA
2. Line # 1 Tile Brush: Brush # 11. Emission Point # 20	NA
3. Line # 2 Tile Brush: Brush # 21. Emission Point # 21	NA
4. Line # 3 Tile Brush: Brush # 31. Emission Point # 22	NA
5. Six Large Ball Mills. Emission Point # 27	NA
6. Small Ball Mill. Emission Point # 28	NA
7. Line # 4 Tile Brush: Brush # 41. Emission Point # 30	NA
8. Line # 5 Tile Brush: Brush # 55. Emission Point # 31	NA
9. Line # 5 Tile Dryer: Dryer # 51. Emission Point # 38	NA
10. Line # 2 Tile Dryer: Dryer # 21. Emission Point # 41	NA
11. Line # 3 Tile Heaters. Emission Point # 44	NA
12. Line # 4 Tile Heaters. Emission Point # 45	NA
13. Forniker Kiln. Emission Point # 69	NA
14. 10,000-gallon diesel fuel storage tank (above ground)	NA
15. 2000-gallon used oil storage tank (above ground)	NA
16. 250-gallon virgin oil tank (above ground)	NA
17. 500-gallon mineral spirits tank (above ground)	NA
18. Storage tanks for waste water treatment chemicals	NA
19. LPG tanks (in excess of 30 psig)	NA
20. LPG tank boiler	NA

**SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)**

<u>Description</u>	<u>Generally Applicable Regulation</u>
21. Natural gas distribution piping (< 60,000 ft <sup>3</sup> /yr)	NA
22. Backup generators	NA
23. Brazing, soldering, welding equipment, and cutting torches related to manufacturing and maintenance construction	NA
24. Cold cleaners with non-halogenated solvent	NA
25. Lab fume hoods and vents for bench-scale physical and chemical analysis	NA
26. Research and Development facilities, quality control testing facilities and/or small pilot projects not making significant contributions to product quality	NA
27. Drilling, machining, sawing, surface grinding, sanding, polishing; ceramics, metals, glass, rubber (indoor)	NA
28. Hot melt adhesive application equipment	NA
29. Equipment used exclusively for mixing and blending water-based adhesives and coatings at ambient temp.	NA
30. Screen printers	NA
31. Compressors	NA
32. Disc glaze applicators	NA
33. Kiln Roller Cleaner	NA
34. Vacuum Dust Collector System	NA
35. Kiln Roller Cleaner. Installed: August 1996	NA
36. Vacuum Dust Collector System. Installed July 1990	NA
37. Rotocolor Ink Printing Machines                      EP 71 and 72	NA

## SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

### Group Requirements:

These emission points are listed in Section B under their respective process lines and are listed here due to common limitations and requirements for emissions of gaseous fluorides as hydrogen fluoride for all kilns.

39 (39)	Line # 1	Roller Kiln:	Kiln # 1. Installed July 1996
42 (42)	Line # 2	Roller Kiln:	Kiln # 2. Installed August 1996
40 (40)	Line # 3	Tunnel Kiln:	Kiln # 3. Installed 1971
70 (70)	Line # 4	Tunnel Kiln:	Kiln # 4. Installed June 1987
29 (29)	Line # 5	Roller Kiln:	Kiln # 5. Installed October 1995

### Applicable Regulations :

401 KAR 53:010, *Ambient air quality standards*, for hydrogen fluoride emissions.

1. Operating Limitations: None

2. Emission Limitations:

Pursuant to Regulation 401 KAR 53:010, *Ambient air quality standards*, emissions of gaseous fluoride (HF) shall not exceed the following averages more than once per year:

- a. Maximum twelve-hour average: 3.68 ug/m<sup>3</sup>
- b. Maximum twenty-four-hour average: 2.86 ug/m<sup>3</sup>

Modeled off-site concentrations of gaseous fluorides as hydrogen fluoride due to all kilns shall not exceed the above limitations. After each respective kiln is stack tested and verified, modeling shall be completed and submitted to the division to update off-site ground level impacts, and to verify that the gaseous HF standard is not being exceeded.

### *Compliance Demonstration Method:*

The permittee shall comply with the ambient air quality standard specified under 401 KAR 53:010, *Ambient air quality standards*, Appendix A, by continuing to vent the hydrogen fluoride from Kilns # 1, 2, and 5 to their respective existing 38-ft stack and Kilns # 3, and 4 to the existing 140-ft stack. During operation of the kilns in accordance with the specific control equipment operating conditions in Section D 7. below, no compliance demonstration is necessary.

3. Testing Requirements:

- a. Pursuant to Regulations 401 KAR 50:055, *General compliance requirements*, 401 KAR 59:005, Section 2(2) and 401 KAR 50:045, Section 1, performance testing using Kentucky Method 130 specified in Regulation 401 KAR 50:015 shall be conducted on Kilns #3 and # 4 (Tunnel Kilns) within 180 days of the effective date of the permit or as required by the division. Kilns 1, 2 and 5 shall be stack tested using Method 130 within 18 months of permit issuance.

**SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)**

- b. Pursuant to Section VII 2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the division shall be notified of the actual test date at least ten (10) days prior to the test. The permittee shall furnish the Division for Air Quality's Frankfort Central Office with a written report of the results of such performance tests.

**4. Monitoring Requirements:**

The permittee shall monitor the following parameters on each kiln.

- a. The processing rates in lbs/hr.
- b. The kiln temperature in degrees C.
- c. The residence time in minutes.

5. **Recordkeeping Requirements:** The permittee shall maintain a log of the hourly and annual cumulative processing rate of tiles, kiln temperature, and residence time for each respective kiln when each kiln is in operation:

**6. Reporting Requirements:**

- a. See the Monitoring, Recordkeeping, and Reporting Requirements Section F.
- b. Excursions as defined in 7. **Specific Control Equipment Operating Requirements** below shall be reported to the division's Frankfort Regional Office in accordance with Monitoring, Recordkeeping, and Reporting Requirements Section F.6.b.

**7. Specific Control Equipment Operating Requirements:**

- a. The temperature of each kiln listed above shall not exceed 1130 °C (+/-20 °C) for any consecutive three (3) hours during the operation of the unit. An excursion is defined as any 12-hour period during which the temperature is above 1150 °C for more than 3 consecutive hours.
- b. The residence time, time required to pass through all stages of kilns 1, 2 and 5 shall not exceed 36 minutes (+/-9 minutes) during the operation of the unit. An excursion is defined as any 12-hour period during which the residence time is above 45 minutes.
- c. The residence time, time required to pass through all stages of kilns 3 and 4 shall not exceed 24 hours (+/-6 hours) during the operation of the unit. An excursion is defined as any 72-hour period during which the residence time is above 30 hours.

## **SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS**

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any emission point including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

## **SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS**

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
  - a. Date, place as defined in this permit, and time of sampling or measurements.
  - b. Analyses performance dates;
  - c. Company or entity that performed analyses;
  - d. Analytical techniques or methods used;
  - e. Analyses results; and
  - f. Operating conditions during time of sampling or measurement;
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality. [401 KAR 50:035, Permits, Section 7(1)(d)2 and 401 KAR 50:035, Permits, Section 7(2)(c)]
3. In accordance with the requirements of Regulation 401 KAR 50:035, Permits, Section 7(2)(c) the permittee shall allow the Cabinet or authorized representatives to perform the following:
  - a. Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
  - b. Have access to and copy, at reasonable times, any records required by the permit:
    - i. During normal office hours, and
    - ii. During periods of emergency when prompt access to records is essential to proper assessment by the Cabinet;
  - c. Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
    - i. During all hours of operation at the source,
    - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
    - iii. During an emergency; and
  - d. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
    - i. During all hours of operation at the source,
    - ii. For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
    - iii. During an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

5. A summary report, in a format approved by the regional office, of any monitoring required by this permit shall be reported to the division's Frankfort Regional Office no later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. The permittee may shift to semiannual reporting on a calendar year basis upon approval of the regional office. If calendar year reporting is approved, the semiannual reports are due January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to Section 6(1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.
6. a. In accordance with the provisions of Regulation 401 KAR 50:055, Section 1 the owner or operator shall notify the Division for Air Quality's Frankfort Regional Office concerning startups, shutdowns, or malfunctions as follows:
  - i. When emissions during any planned shutdowns and ensuing startups will exceed the standards notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
  - ii. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards notification shall be made as promptly as possible by telephone (or other electronic media) and shall cause written notice upon request.
- b. In accordance with the provisions of Regulation 401 KAR 50:035, Section 7(1)(e)2, the owner or operator shall promptly report deviations from permit requirements including those attributed to upset conditions (other than emission exceedances covered by general condition 6 a. above) to the Division for Air Quality's Frankfort Regional Office. Prompt reporting shall be defined as follows:
  - i. For deviations other than emission limit deviations and excursions:
    - a) For deviations less than or equal to 24-hours in duration, the permittee will include a summary of the excursions in the semiannual reporting required by **Condition F.5**.
    - b) For deviations greater than 24 hours in duration, the permittee will contact the Frankfort Regional office within 72 hours (excluding weekends and holidays) and will include a summary of the deviation in the semiannual reporting required by **Condition F.5**.
    - c) For failure to record the parameters used to monitor the performance control devices (afterburners, scrubbers, baghouses, etc.), the permittee will include a summary of the excursions in the semiannual reporting required by **Condition F.5**.
  - ii. For emission related exceedances:
    - a) For exceedances less than or equal to 12-hours in duration, the permittee will include a summary of the exceedance in the semiannual reporting required by **Condition F.5** above.
    - b) For exceedances greater than 12-hours in duration, the permittee shall contact the Frankfort Regional office within 72 hours (excluding weekends and holidays) and will include a summary of the exceedance in the semiannual reporting required by **Condition F.5**.

**SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)**

## iii. For other requirements:

In the event that the permittee is unable to fulfill a requirement (such as a performance test, compliance certification submittal) within the time frame specified herein, the permittee shall contact the Frankfort Regional Office and the Frankfort Central office within 72 hours of expiration of the relevant time frame and will include a summary of the event in the semiannual reporting required by **Condition F.5**. Extensions of the time frames specified herein may be granted by the division upon a satisfactory request showing that an extension is justified.

7. Pursuant to Regulation 401 KAR 50:035, Permits, Section 7(2)(b), the permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date or by January 30th of each year if calendar year reporting is approved by the regional office, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an approved alternative) to the Division for Air Quality's Frankfort Regional Office and the U.S. EPA in accordance with the following requirements:
- Identification of each term or condition of the permit that is the basis of the certification;
  - The compliance status regarding each term or condition of the permit;
  - Whether compliance was continuous or intermittent; and
  - The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to 401 KAR 50:035, Section 7(1)(c), (d), and (e).
  - The certification shall be postmarked by the thirtieth (30) day following the applicable permit issuance anniversary date, or by January 30th of each year if calendar year reporting is approved by the regional office. **Annual compliance certifications should be mailed to the following addresses:**

**Division for Air Quality  
Frankfort Regional Office  
643 Teton Trail  
Frankfort, KY 40601**

**U.S. EPA Region IV  
Air Enforcement Branch  
Atlanta Federal Center  
61 Forsyth St.  
Atlanta, GA 30303-8960**

**Division for Air Quality  
Central Files  
803 Schenkel Lane  
Frankfort, KY 40601**

8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall provide the division with all information necessary to determine its subject emissions within thirty (30) days of the date the KEIS emission report is mailed to the permittee.
9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance test(s) required by the permit shall be submitted to the division by the source or its representative within forty-five days after the completion of the fieldwork.

**SECTION G - GENERAL CONDITIONS****(a) General Compliance Requirements**

1. The permittee shall comply with all conditions of this permit. A noncompliance shall be (a) violation(s) of state regulation 401 KAR 50:035, Permits, Section 7(3)(d) and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and is grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.
2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.
3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
  - a. If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
  - b. The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.;
  - c. The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the division, in writing, information that the division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. [401 KAR 50:035, Permits, Section 7(2)(b)3e and 401 KAR 50:035, Permits, Section 7(3)(j)]
5. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority.
6. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit. [401 KAR 50:035, Permits, Section 7(3)(k)]

**SECTION G - GENERAL CONDITIONS (CONTINUED)**

7. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance. [401 KAR 50:035, Permits, Section 7(3)(e)]
8. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.
9. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6). [401 KAR 50:035, Permits, Section 7(3)(h)]
10. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance. [401 KAR 50:035, Permits, Section 8(3)(b)]
11. This permit shall not convey property rights or exclusive privileges. [401 KAR 50:035, Permits, Section 7 (3)(g)]
12. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.
13. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry. [401 KAR 50:035, Permits, Section 7(2)(b)5]
14. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders. [401 KAR 50:035, Permits, Section 8(3)(a)]
- 15 Permit Shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the emission points listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.
16. All previously issued construction and operating permits are hereby subsumed into this permit.

## **SECTION G - GENERAL CONDITIONS (CONTINUED)**

### **(b) Permit Expiration and Reapplication Requirements**

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the division. [401 KAR 50:035, Permits, Section 12]

### **(c) Permit Revisions**

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.
2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.
3. Pursuant to Section VII 2.2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:0016, Section 1.(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the division's Frankfort Central Office. Pursuant to 401 KAR 50:045, Section 5, the division shall be notified of the actual test date at least ten (10) days prior to the test.

### **(d) Acid Rain Program Requirements**

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

### **(e) Emergency Provisions**

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
  - a. An emergency occurred and the permittee can identify the cause of the emergency;
  - b. The permitted facility was at the time being properly operated;

## SECTION G - GENERAL CONDITIONS (CONTINUED)

- c. During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
  - d. The permittee notified the division as promptly as possible and submitted written notice of the emergency to the division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.
2. Emergency conditions listed in General Condition (f)1 above are in addition to any emergency or upset provision(s) contained in an applicable requirement.
  3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof. [401 KAR 50:035, Permits, Section 9(3)]

### (f) Risk Management Provisions

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:  
RMP Reporting Center  
P.O. Box 3346  
Merrifield, VA, 22116-3346
2. If requested, submit additional relevant information to the division or the U.S. EPA.

### (g) Ozone depleting substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166.
  - e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

## **SECTION G - GENERAL CONDITIONS (CONTINUED)**

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

## **SECTION H - ALTERNATE OPERATING SCENARIOS**

Not Applicable

## **SECTION I - COMPLIANCE SCHEDULE**

To implement any new monitoring, recordkeeping, and reporting requirements included herein, the division hereby authorizes a ninety (90) day compliance schedule, beginning with issuance of this permit modification.